

US Claims

1. An edible water-in-oil microemulsion that is transparent or translucent in appearance, the microemulsion comprising oil, a surfactant, a cosurfactant or cosolvent and a water phase comprising water and optional water-soluble components; wherein the oil comprises from 25 to 97 wt% diglycerides relative to the total weight of glycerides.
2. A microemulsion as claimed in claim 1 wherein the oil comprises from 50 to 85 wt% diglycerides.
3. A microemulsion as claimed in claim 1 or 2 comprising from 40 to 97 wt% oil.
4. A microemulsion as claimed in claim 1 comprising from 1 to 40 wt% surfactant.
5. A microemulsion as claimed in claim 4 comprising from 2 to 25 wt% surfactant.
6. A microemulsion as claimed in claim 1, wherein the surfactant is one or more monoglyceride esters or diglyceride esters.
7. A microemulsion as claimed in claim 6, wherein the surfactant is selected from the group consisting of phospholipids and mono- or diglyceride esters of citric acid, tartaric acid and lactic acid.
8. A microemulsion as claimed in claim 7 wherein the surfactant is selected from the group consisting of phospholipids, mono- or diglyceride esters of citric acid and mixtures thereof.

9. A microemulsion as claimed in claim 8 wherein the surfactant is lecithin.
10. A microemulsion as claimed in claim 1 comprising from 0.1 to 25 wt% water phase.
11. A microemulsion as claimed in claim 10 comprising from 1 to 15 wt% water phase.
12. A microemulsion as claimed in claim 1 comprising 0 to 30 wt% cosurfactant or cosolvent.
13. 13. A microemulsion as claimed in claim 12 comprising from 0.1 to 10 wt% cosurfactant or cosolvent.
14. A microemulsion as claimed in claim 1, wherein the mole ratio of water phase to surfactant is in the range of from 5 to 70.
15. A microemulsion as claimed in claim 1, wherein the cosurfactant is one or more non-toxic, amphiphilic molecules.
16. A microemulsion as claimed in claim 15, wherein the non-toxic, amphiphilic molecule has a molecular weight of less than 100.
17. A microemulsion as claimed in claim 15 or claim 16 wherein the cosurfactant is selected from the group consisting of alcohols, acids, esters and mixtures thereof.
18. A microemulsion as claimed in claim 17 wherein the cosurfactant is selected from the group consisting of ethanol, acetic acid, butyl lactate and mixtures thereof.

19. A microemulsion as claimed in claim 1 comprising one or more water-soluble components selected from the group consisting of dairy products, proteins, peptides, salts, sugars, sweeteners, flavouring agents, flavour precursors, nutrients, vitamins, minerals, acids, seasonings and antioxidants.
20. A microemulsion as claimed in claim 1 comprising one or more salts.
21. A process for the preparing a microemulsion according to claim 1 comprising the following steps:
 - a) preparing a water phase, including dissolving any water-soluble components in water;
 - b) preparing an oil phase, including dissolving any oil-soluble components in oil;
 - c) emulsifying the oil and water phases.
22. A food product comprising a microemulsion as claimed in any claim 1.
23. Use of a microemulsion as claimed in claim 1 in or as a food product.